



YALE OIL SOUTH DAKOTA FACILITY UPDATE

STATE SUPERFUND UNIT

DECEMBER 2014

Background

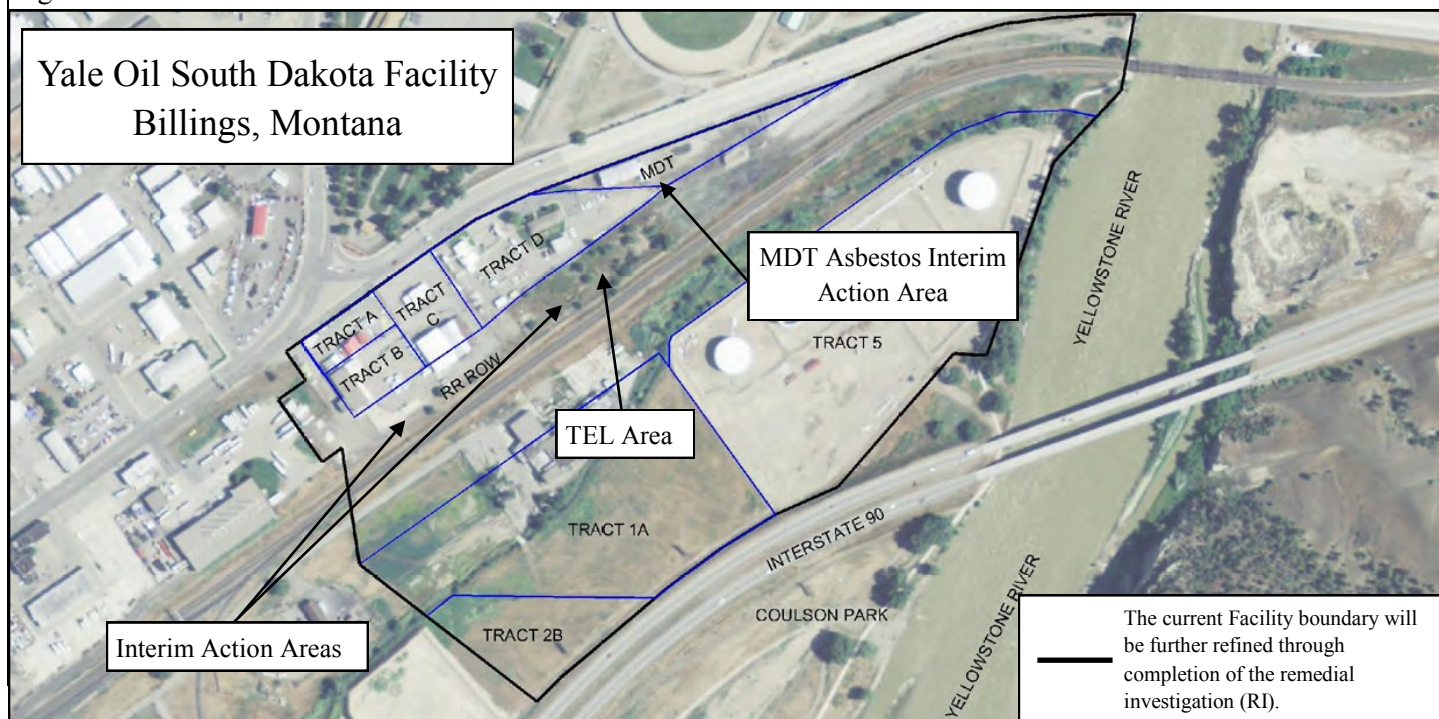
The Yale Oil of South Dakota Facility (Facility) consists of approximately 70 acres on the east end of Billings, Montana. The Facility includes property formerly used by the Yale Oil of South Dakota Refinery, Yale/Carter Oil Refinery, and the Montana Refining Company for refining operations beginning in the early 1920's. Historical refinery maps show numerous tanks and structures associated with the refinery operations, including a tetraethyl lead (TEL) plant, a service station, paint shop, a crude oil sump, pumps, pump house, and sludge ponds. Present day uses include auto sales, industrial painting, offices, various petroleum pipeline operations, industrial fabrication, road material storage, railroad, and a petroleum tank farm. An aerial view of the Facility is located at the bottom of this page.

Operations at the Facility have caused soil and groundwater contamination. There is a long documented history of several spills at the Facility. The Facility properties have also been used for dumping of unknown substances. Besides the numerous petroleum-related spills occurring in relation to the refinery, tank farm, and pipeline activities, there is also evidence of lead and other metal contamination associated with the tetraethyl lead plant and the paint factory.

In 2005, a fence and warning signs were installed on a portion of the Facility that contained a small pond near the former tetraethyl lead plant. The area had tested high for lead, and the fence was constructed to discourage use of the area by trespassers.

What's Been Happening at The Facility?

Interim Remedial Actions: In May and June 2013, an interim action was completed in the railroad right-of-way directly south of the Tracts B and D (see figure below). Within this area, petroleum and other materials in a concrete trench and piping were removed and disposed. Additionally, an abandoned storage tank, car bodies, and other former refinery debris were removed and properly disposed. The concrete trench was filled to improve safety and prevent future dumping activities.



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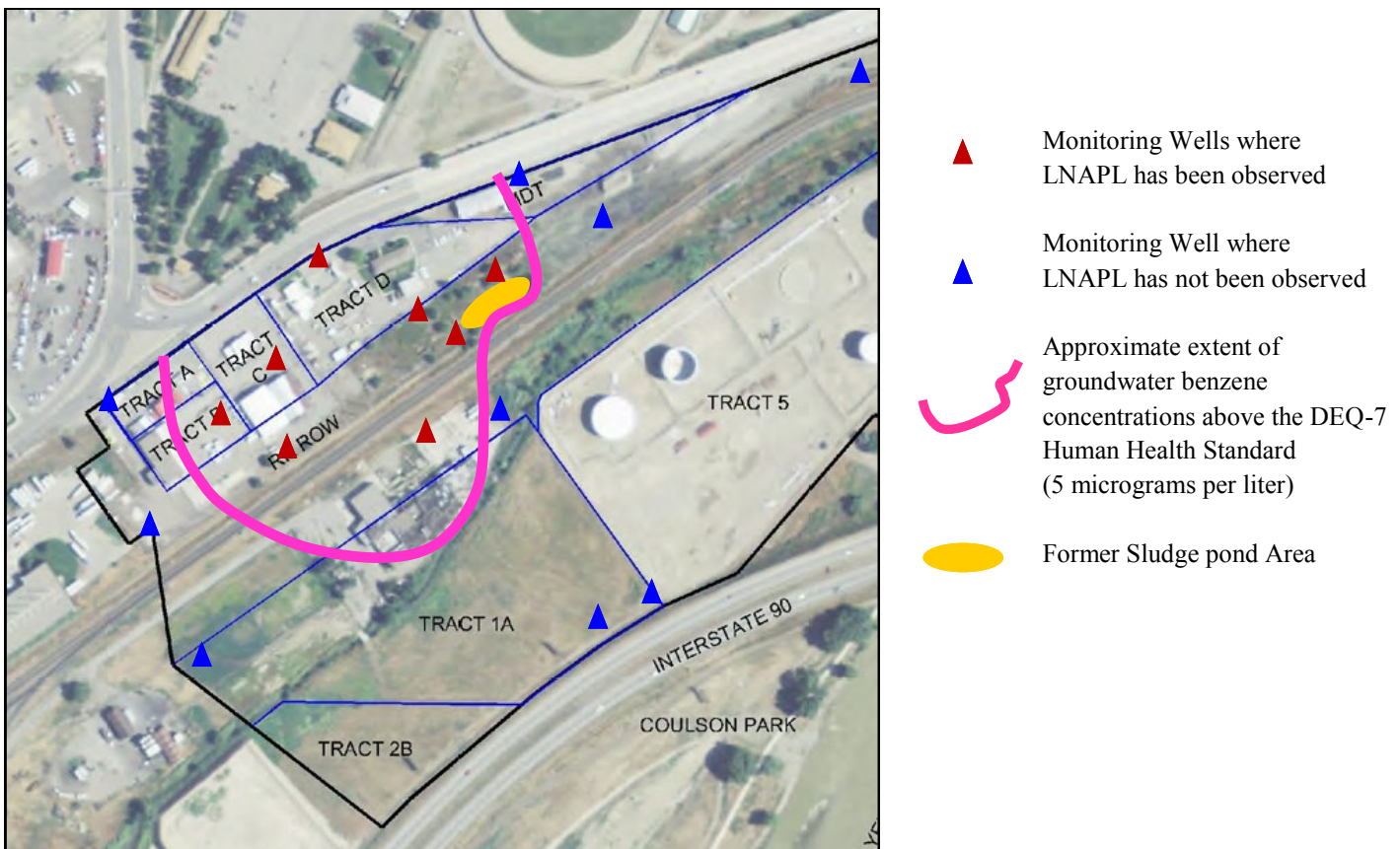
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Interim Remedial Actions Continued: In July 2014, the Montana Department of Transportation (MDT) performed asbestos cleanup activities to remove asbestos materials that were coming off their building roof. Asbestos was also found in soils next to, and down-wind, of the building. Cleanup activities in July 2014, did not remove all asbestos materials in the soils surrounding the building. MDT will perform further soil removal activities to complete this interim action., anticipated to be completed by the end of 2014.

Remedial Investigation: From October 2012 ,through August 2013, the potentially liable persons group (YOSD PLP Group) performed the first phase of the remedial investigation (RI). An RI is typically the first step in the Superfund process, and is intended to identify the contamination at the Facility. The RI included collecting surface soil, subsurface soil, sediment, groundwater, and surface water samples at locations throughout the Facility.

Floating petroleum has been observed in eight (8) different groundwater monitoring wells installed at the Facility (see locations below). Petroleum compounds are also dissolved in the groundwater. Billings drinking water is not affected by the Facility since it comes from surface water upstream from the Facility.

Metals, primarily lead and petroleum compounds, are present in surface soils (soils between the surface and two-feet below the surface) and at depth (deeper than two-feet). The highest concentrations are present in the area of the former TEL plant (south of Tract D), the railroad right-of-way, and in Tracts A, B, C, and D. Additional evaluation will determine if the concentrations pose an unacceptable potential risk to residents and workers.



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On-going and Future Activities at the Facility

Vapor Intrusion Investigation: In January and February of 2014, a vapor intrusion investigation was performed at the Facility. Results from the investigation prompted DEQ to require the YOSD PLP Group to mitigate two buildings at the Facility. Mitigation of vapor intrusion is similar to radon mitigation. Mitigation activities began in September 2014. Completion of the activities, including upgrading existing HVAC systems in the buildings, is anticipated to be completed by Spring 2015.

Supplemental Remedial Investigation: DEQ-required supplemental RI activities began in October 2014. Activities have included installation of six additional groundwater monitoring wells and soil sampling activities to help determine where the floating petroleum is and ensure that Facility contamination has not moved north of the Facility. With this supplemental RI information, the YOSD PLP Group will move forward with developing site-specific clean up levels (SSCLs) in the risk assessment and evaluating strategies to clean up the Facility with the future feasibility study (FS).



If you have questions, please contact:

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For more information about the Facility, please visit:

<http://www.deq.mt.gov/StateSuperfund/yaleoilsd.mcpx>